



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 4
ATLANTA FEDERAL CENTER
61 FORSYTH STREET, S.W.
ATLANTA, GEORGIA 30303-8960

January 25, 2018

(b)(6)

SUBJ: EPA Asbestos Removal at 235 Eden Street

Dear (b)(6) :

Enclosed, you will find the Removal Action Status Report for the property located at 235 Eden Street in Davidson, North Carolina. The report summarizes information regarding the original asbestos sampling, a description of the Removal Action conducted on the property, a summary of multimedia sampling results, details on the restoration of the property and the timeframe of the Removal Action. We have also included a figure of the removal area and the air sampling locations, a table of the air sampling results and photographs of the removal activities.

The removal activities have been completed and there are no further actions needed on the above-mentioned property. If you have any questions or need further information, please do not hesitate to contact Jordan Garrard, US EPA, Federal On-Scene Coordinator directly at (678) 644-8648, via email: garrard.jordan@epa.gov or myself directly at (678) 575-8132, via email: miller.angela@epa.gov, at any time.

It was such a pleasure working with you and your community. Thank you for your cooperation and patience throughout the removal activities.

Sincerely,

Angela R. Miller, US EPA
Community Involvement Coordinator

Enclosure(s)

cc: Jordan Garrard, US EPA, Federal On-Scene Coordinator
Miguel Alvalle, NC DEQ

REMOVAL ACTION STATUS REPORT DAVIDSON ASBESTOS

Property Address: 235 Eden Street, Davidson, Mecklenburg County, North Carolina

Original Asbestos Sampling Information: Surface soil samples were not collected because asbestos-containing material (ACM) was at this property.

Description of Removal Action: The soil was excavated to an approximate maximum depth in the following areas: lawn to 12 inches and along the residential and southern shed foundations and the tree and shrub line areas to 3 inches (see Appendix 1). Visual inspections of the areas excavated for ACM were conducted by a State of North Carolina-accredited asbestos inspector and air monitor. Additional removal was conducted in those areas where ACM were still visibly present, except along the base of the southern shed to prevent destabilization of its foundation and past the property boundary. Once ACM was no longer visibly present throughout the main portion of the excavated area, restoration was allowed to commence. The visible, remaining ACM was photographed and documented in the site logbook before restoration began.

Summary of Multimedia Sampling Results: Perimeter air sampling was conducted at seven stationary locations during removal activities from July 31 through August 14, 2017. Air sampling was conducted daily at one to four of those locations as weather permitted and based on wind direction and removal activities. The analytical results were less than the limit of detection and ranged from less than 0.00012 fibers per cubic centimeter (f/cc) to less than 0.0027 f/cc. Of the 13 air perimeter air samples collected, sample DA-235ES-AA-L03-080217, was not able to be analyzed because of particulate overloading (see Appendix 2). A 30-point composite soil sample was collected from the excavated areas before restoration began and the analytical result indicated no asbestos detected.

Perimeter air and composite soil samples were conducted by a State of North Carolina-accredited air monitor with oversight from a State of North Carolina-accredited supervising air monitor (SAM).

Restoration of Property: Restoration work included installation of snow fencing on top of the subsurface of the excavated lawn area, snow fencing and red "Danger Asbestos" tape around the southern shed area, backfill, topsoil, and sod in the excavated lawn areas and in portions of the southern shed area, topsoil and mulch around the tree and shrub lines, topsoil, grass seed, and straw matting along the southern hill, and snow fencing, backfill, and two types of rock in the in the southern shed area. All areas were restored to the original height of the surrounding grade.

Time Frame of Removal Action: Removal activities began on July 31, 2017, and were completed on August 15, 2017.

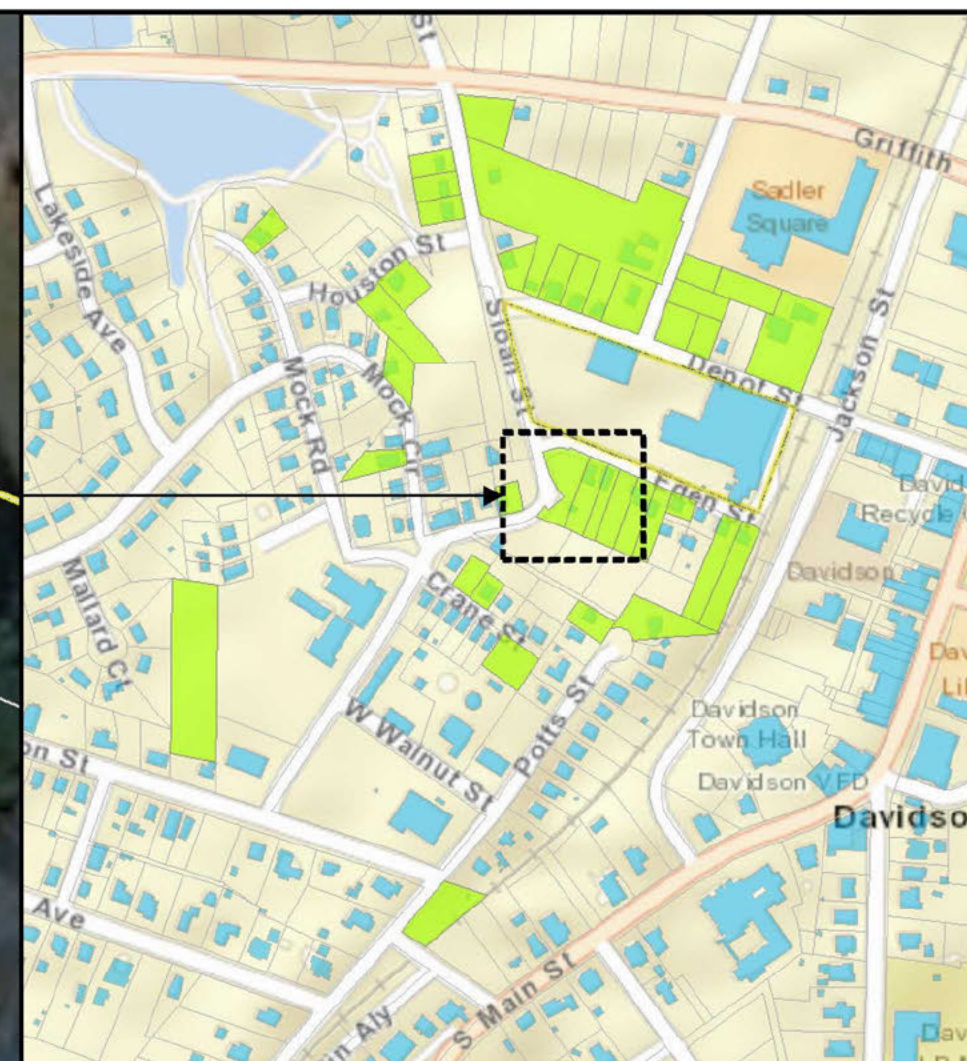
Appendices to this report include:

1. Figure of removal area and air sampling locations
2. Table of air sampling results
3. Photographic log of removal activities

APPENDIX 1

FIGURE

(One Page)



Legend

- Air Sample
- Removal Area
- Parcel Boundary
- Approximate Site Boundary

Inset Map

- Parcels with Removal Activities
- Building/Structure



0 25 50
Feet

Map Sources:
Aerial Imagery, Bing Maps, 2012-2014;
Parcels, <http://maps.co.mecklenburg.nc.us>



United States
Environmental Protection Agency
Region 4

FIGURE 1

Removal Areas and
Air Sampling Locations

TDD Name: Davidson Asbestos

TDD No.: TT-01-071

City: Davidson County: Mecklenburg State: North Carolina



Date:
9/21/2017
Analyst:
dale.vonbusch

235 Eden Street

APPENDIX 2

SUMMARY TABLE OF ANALYTICAL RESULTS

(One Page)

TABLE 1
TRANSMISSION ELECTRON MICROSCOPY RESULTS
DAVIDSON ASBESTOS
DAVIDSON, MECKLENBURG COUNTY, NORTH CAROLINA

Sample Id	Location	T	Pump No.	Time Start	Time Stop	Total (Min)	Pump Flow Rate (lpm)			Total Sample Volume (l)	PCM Results (f/cc)	Asbestos Fibers Detected	TEM Results in PCME (f/cc)
							Initial	Final	Average				
DA-235ES-AA-L01-073117	235 Eden Street - Location 1	AA	G6	8:33	15:26	413	10.36	10.01	10.19	4206.4	0.0037	0	<0.00074
DA-235ES-AA-L02-073117	235 Eden Street - Location 2	AA	G4	8:49	15:32	403	10.47	9.95	10.21	4114.6	0.0027	0	<0.0027
DA-235ES-AA-L03-073117	235 Eden Street - Location 3	AA	G3	8:51	15:35	404	10.55	10.29	10.42	4209.7	0.0017	0	<0.00085
DA-235ES-AA-L02-080117	235 Eden Street - Location 2	AA	G1	7:57	15:36	459	9.74	9.29	9.52	4367.4	0.0009	0	<0.00015
DA-235ES-AA-L03-080117	235 Eden Street - Location 3	AA	G3	8:00	15:39	459	9.78	9.50	9.64	4424.8	0.0021	0	<0.0007
DA-235ES-AA-L04-080117	235 Eden Street - Location 4	AA	G6	7:50	15:32	462	9.73	9.37	9.55	4412.1	0.00089	0	<0.00015
DA-235ES-AA-L03-080217	235 Eden Street - Location 3	AA	G3	8:13	15:34	441	9.68	9.73	9.71	4279.9	Sample not analyzed due to particulate overloading.		
DA-235ES-AA-L05-080217	235 Eden Street - Location 5	AA	G1	8:24	15:41	437	9.73	9.63	9.68	4230.2	0.0042	0	<0.00053
DA-235ES-AA-L06-080217	235 Eden Street - Location 6	AA	G6	8:41	15:51	430	10.01	10.07	10.04	4317.2	0.0033	0	<0.00037
DA-235ES-AA-L07-080217	235 Eden Street - Location 7	AA	G4	8:51	15:56	425	10.02	9.94	9.98	4241.5	0.0013	0	<0.00012
DA-235ES-AA-L05-080317	235 Eden Street - Location 5	AA	G4	7:59	15:00	421	9.64	9.72	9.68	4075.3	0.0014	0	<0.0007
DA-235ES-AA-L02-081417	235 Eden Street - Location 2	AA	G1	7:54	15:07	433	9.76	9.43	9.60	4154.6	0.0017	0	<0.00043
DA-235ES-AA-L03-081417	235 Eden Street - Location 3	AA	G3	7:56	15:05	429	9.67	9.40	9.54	4090.5	0.0019	0	<0.00095

Notes:

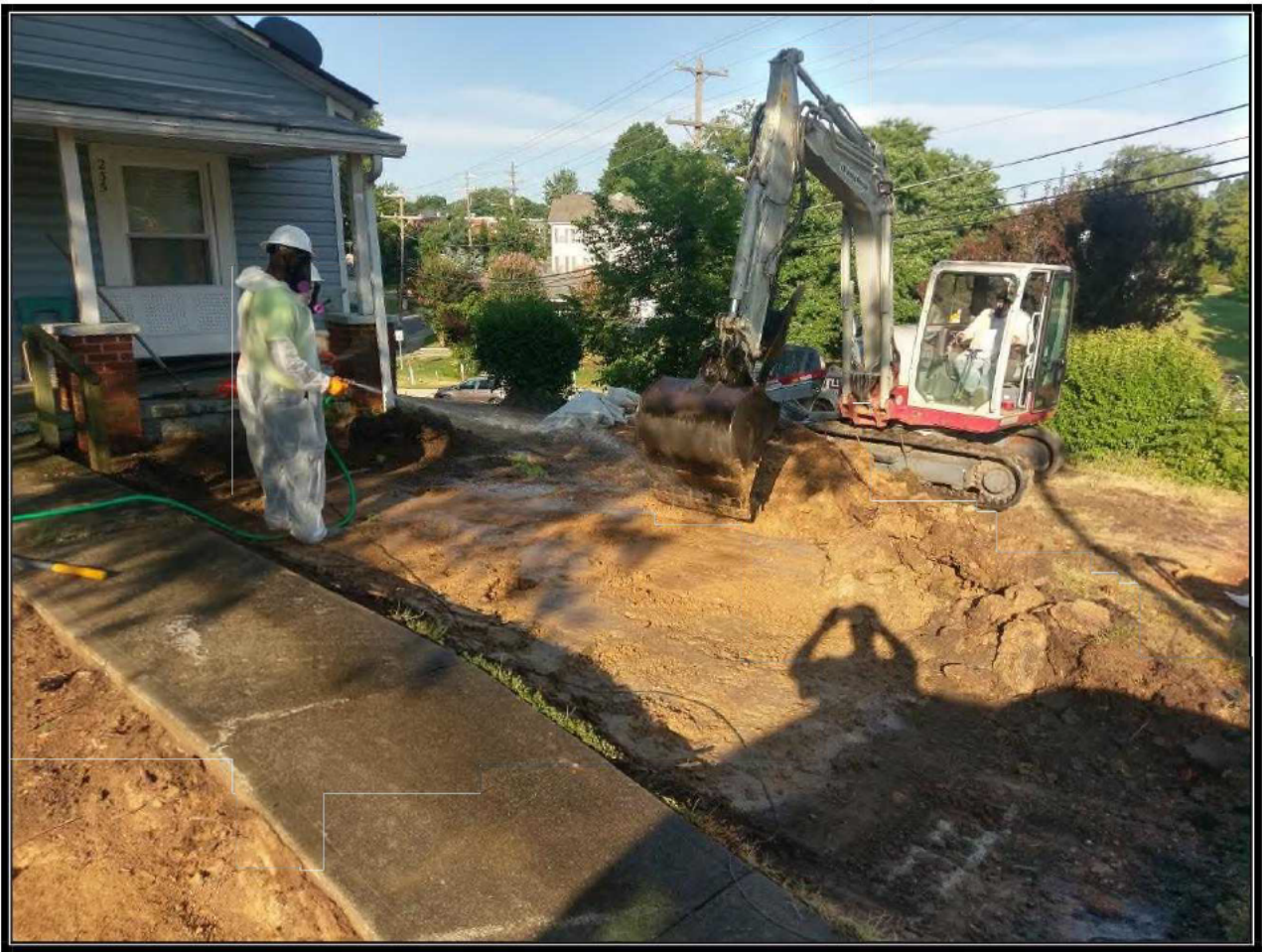
<: Less than
AA: Area air sampling
DA: Davidson Asbestos

ES: Eden Street
f/cc: Fibers per cubic centimeter
Id: Identification

l: Liters
lpm: Liters per minute
Min: Minutes

PCM: Phase contrast microscopy
PCME: Phase contrast microscopy equivalent
TEM: Transmission electron microscopy

APPENDIX 3
PHOTOGRAPHIC LOG
(Eight Pages)



**OFFICIAL PHOTOGRAPH NO. 1
U.S. ENVIRONMENTAL PROTECTION AGENCY**

TDD Number: TT-01-071

Location: Davidson Asbestos

Orientation: Southwest

Date: August 1, 2017

Photographer: Paul Prys, Tetra Tech, Inc. (Tetra Tech)

Witness: None

Subject: The Emergency and Rapid Response Services (ERRS) contractor, Environmental Restoration, LLC (ER), used an excavator and hand tools to remove asbestos-containing materials (ACM) and asbestos-contaminated soil from the property located at 235 Eden Street. ER used hoses to wet the asbestos-contaminated soil during removal activities.



OFFICIAL PHOTOGRAPH NO. 2
U.S. ENVIRONMENTAL PROTECTION AGENCY

TDD Number: TT-01-071

Location: Davidson Asbestos

Orientation: Not applicable

Date: August 3, 2017

Photographer: Paul Prys, Tetra Tech

Witness: None

Subject: Tetra Tech Superfund Technical Assessment and Response Team (START), State of North Carolina-accredited asbestos inspector and air monitor, visually inspected the excavated areas for the presence of visible ACM. ER removed additional soil in those areas where ACM were still visibly present, except beneath the southern shed to prevent destabilization of the foundation or to extend past the property boundary.



OFFICIAL PHOTOGRAPH NO. 3
U.S. ENVIRONMENTAL PROTECTION AGENCY

TDD Number: TT-01-071

Location: Davidson Asbestos

Orientation: Northeast

Date: August 3, 2017

Photographer: Paul Prys, Tetra Tech

Witness: None

Subject: ER installed snow fencing along the subsurface of the excavated residential area after the visual inspection conducted by Tetra Tech START, State of North Carolina-accredited asbestos inspector and air monitor, detected no visible ACM.



OFFICIAL PHOTOGRAPH NO. 4
U.S. ENVIRONMENTAL PROTECTION AGENCY

TDD Number: TT-01-071

Location: Davidson Asbestos

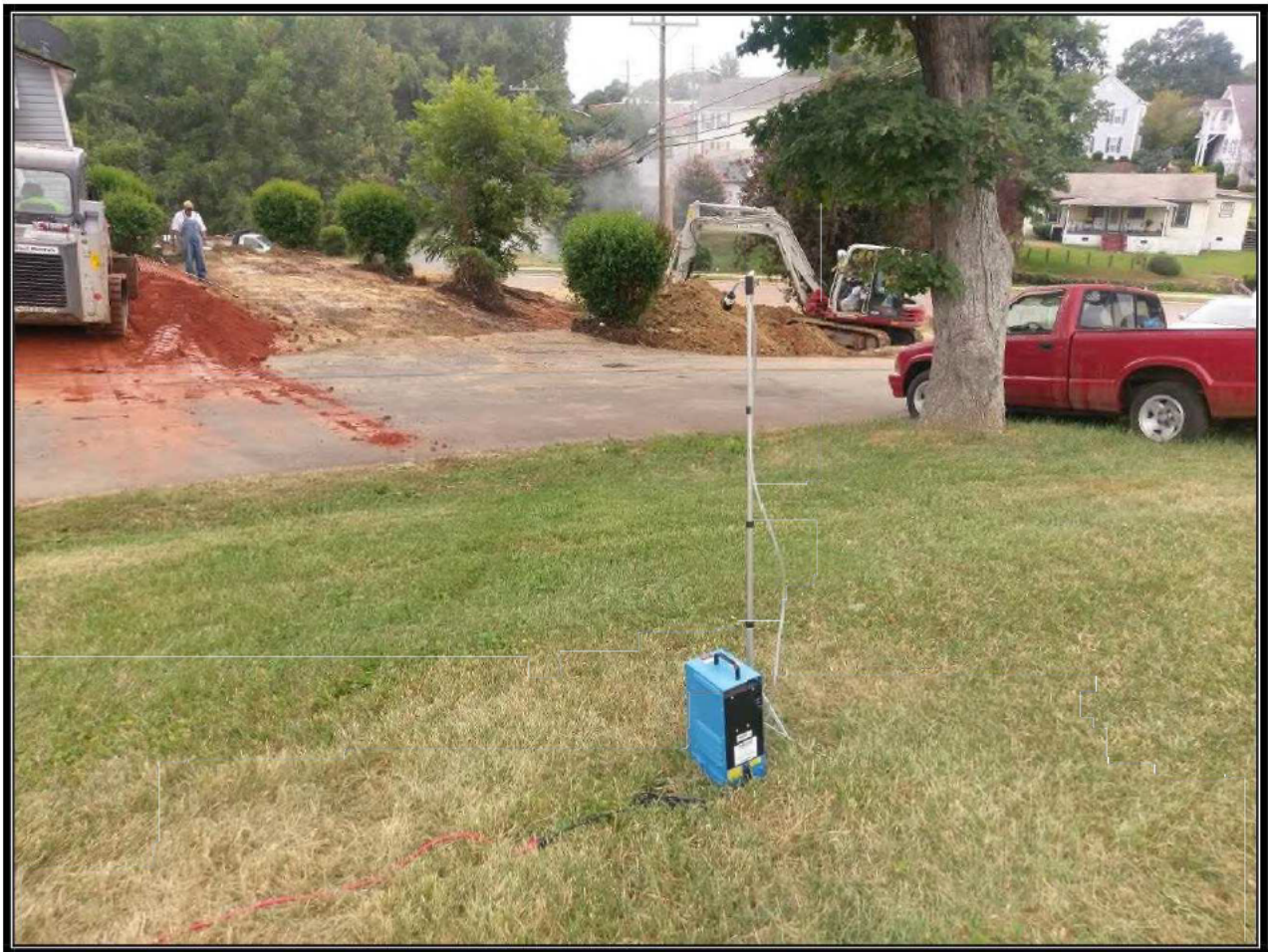
Orientation: Northwest

Date: August 15, 2017

Photographer: Paul Prys, Tetra Tech

Witness: None

Subject: ER installed snow fencing and red "Danger Asbestos" tape along the subsurface of the excavated southern area to identify the depth of the excavation and the presence of ACM.



OFFICIAL PHOTOGRAPH NO. 5
U.S. ENVIRONMENTAL PROTECTION AGENCY

TDD Number: TT-01-071

Location: Davidson Asbestos

Orientation: Southwest

Date: August 2, 2017

Photographer: Paul Prys, Tetra Tech

Witness: None

Subject: Perimeter air sampling was conducted by a Tetra Tech START, State of North Carolina-accredited air monitor, to evaluate the effectiveness of engineering and safety controls in preventing the off-site migration of asbestos fibers during removal activities.



OFFICIAL PHOTOGRAPH NO. 6
U.S. ENVIRONMENTAL PROTECTION AGENCY

TDD Number: TT-01-071

Location: Davidson Asbestos

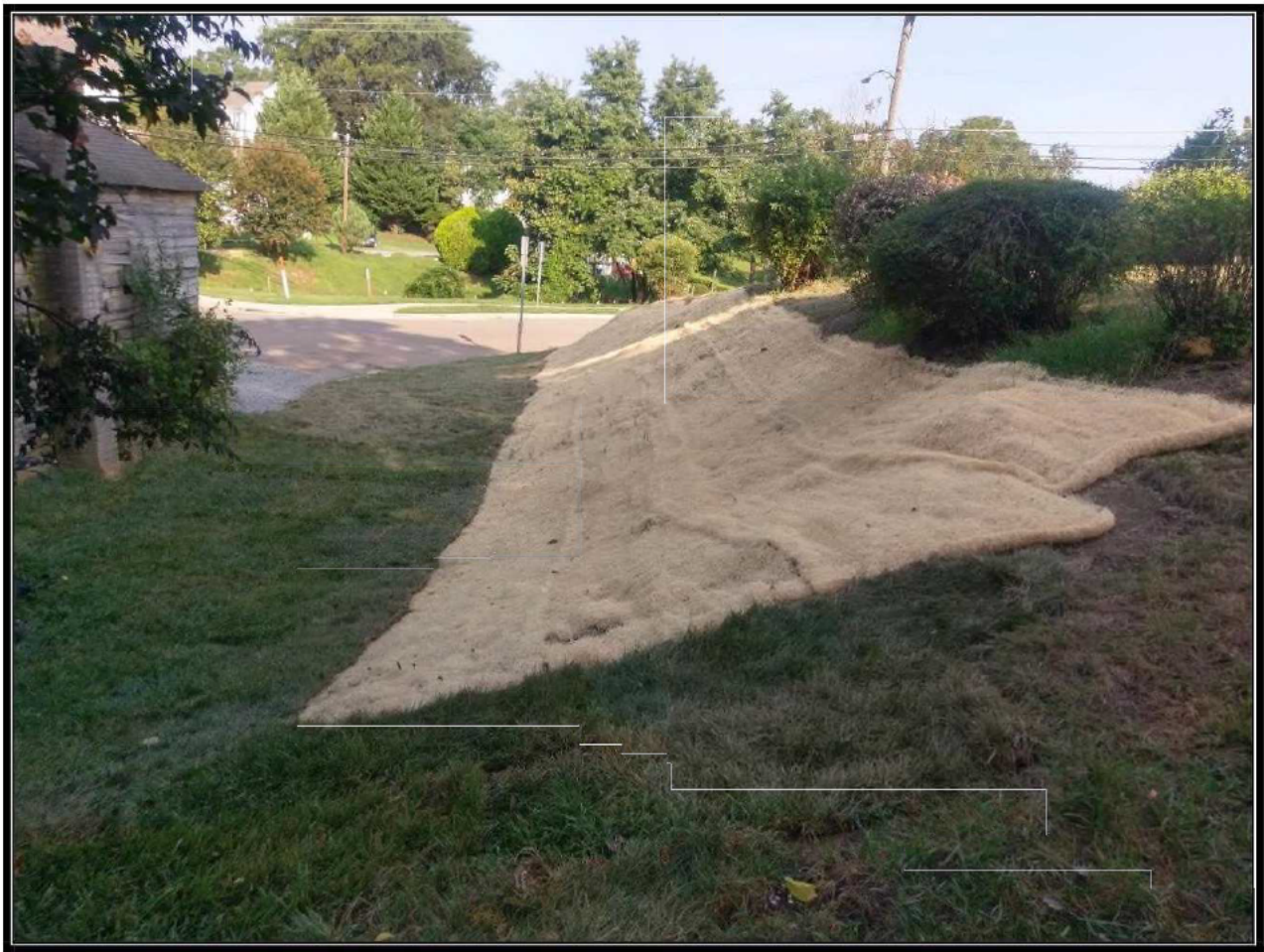
Orientation: North

Date: August 3, 2017

Photographer: Paul Prys, Tetra Tech

Witness: None

Subject: ER installed backfill in the excavated areas using dump trucks and skid steers.



OFFICIAL PHOTOGRAPH NO. 7
U.S. ENVIRONMENTAL PROTECTION AGENCY

TDD Number: TT-01-071

Location: Davidson Asbestos

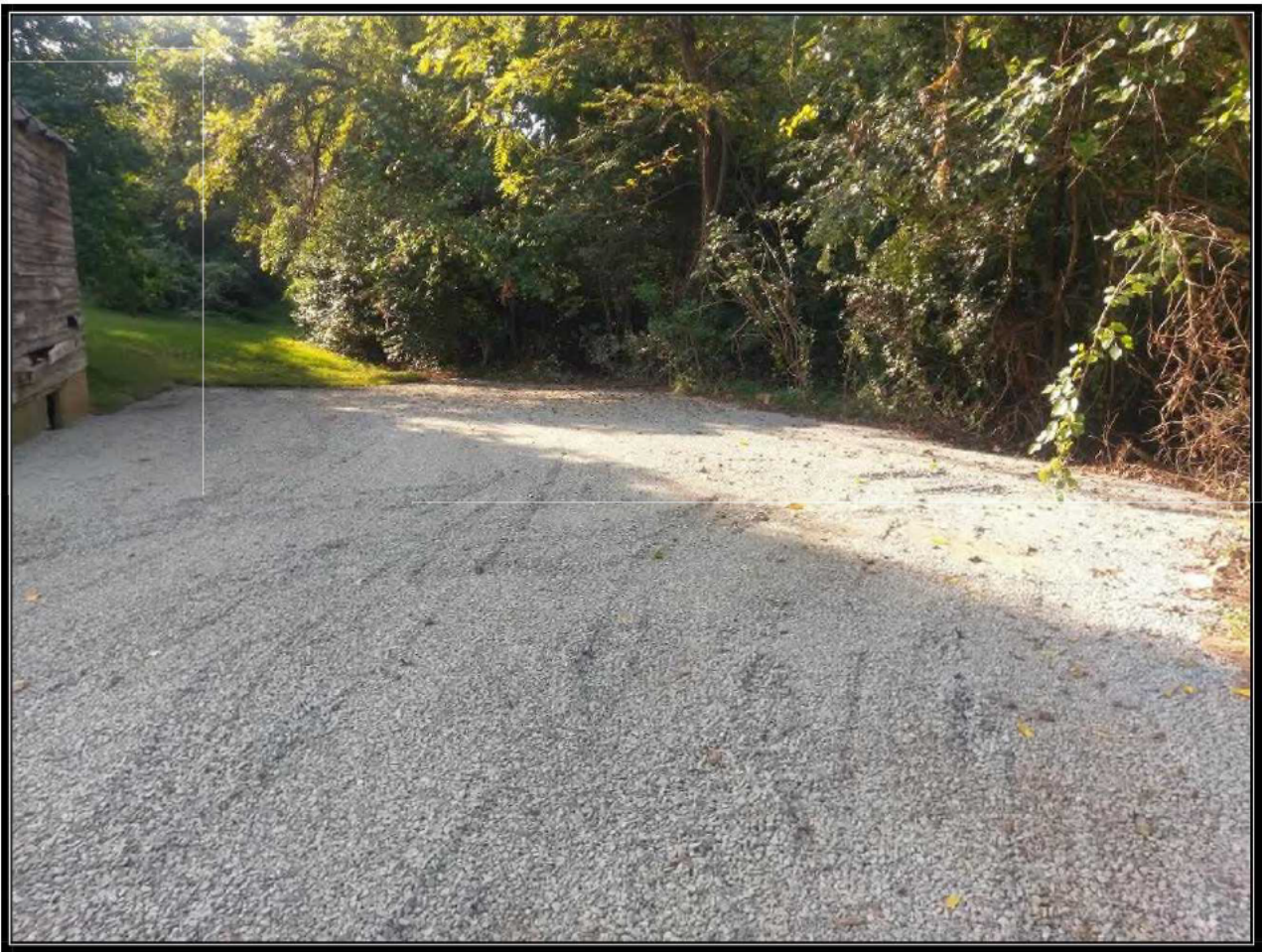
Orientation: West

Date: August 21, 2017

Photographer: Paul Prys, Tetra Tech

Witness: None

Subject: ER installed straw matting, grass seed, and sod in the excavated areas after backfill and topsoil were in place.



OFFICIAL PHOTOGRAPH NO. 8
U.S. ENVIRONMENTAL PROTECTION AGENCY

TDD Number:	TT-01-071	Location:	Davidson Asbestos
Orientation:	West	Date:	August 21, 2017
Photographer:	Paul Prys, Tetra Tech	Witness:	None
Subject:	ER installed two layers of rock in the southern excavated area after backfill was in place.		